March 1, 2012

Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Comments: FCC IB Docket No. 11-109

Dear Mr. Chairman,

Background. On June 15 and August 1, 2011, CENX was one of a large number technology and venture capital firms that wrote to you encouraging the FCC to develop a "win-win" solution for America. The filings stressed that it is imperative, and in the vital interest of the country, that the FCC create an environment where LightSquared and GPS can co-exist and that crafting such a solution is consistent with the charter of the FCC.

The filings also observed that wireless services have become an invaluable engine for productivity and innovation in the U.S. economy, and they play a critical component in the U.S. retaining its lead in global competitiveness. The importance of building the world's first ever nationwide end-to-end full IP wireless network and taking the global lead in LTE deployment cannot be overstated. Once complete, the LightSquared network will sharply increase the nation's broadband capacity, enhancing wireless competition and providing additional choice in the wireless industry. In addition, LightSquared is poised to deliver unique capabilities to support public safety and has made an aggressive commitment to bring broadband to rural communities. Moreover, its unique, collaborative open-platform design combined with its 100% wholesale business model promises to spawn innovation by supporting new entrants and leading edge applications. LightSquared is enabling an ecosystem of third party software, hardware, and applications providers who will collectively seek to transform not only the wireless industry, but also other industries such as health care, automotive, transportation, education, media, entertainment, and energy. In a highly competitive 21st century global economy, the U.S. cannot afford to stifle such innovation.

LightSquared's Proposal. On June 30, LightSquared made significant concessions in an effort to construct a win-win solution. It proposed operating on the lower 10 MHz of its authorized L-band frequencies – the frequencies furthest away from the GPS frequencies - which would leave a buffer or guard band of 23 MHz between itself and the closest GPS frequency. This proposal is not only a commendable step forward for resolving this matter, but it is identical to the recommendation made by the GPS Industry Council when it first identified the potential for interference just months ago. Test results show that over 99.5% of existing GPS devices would not be affected if LightSquared were to operate on the lower 10 MHz, and LightSquared has committed to addressing those small number of receivers still impacted.

Fear is Not a Solution. It is critical to recognize that LightSquared's sacrifice of full use of its spectrum is a constructive solution that helps develop a new, nationwide 4G-LTE network complemented with satellite coverage as a way of significantly expanding broadband access nationwide while mitigating the risk of GPS interference. In contrast, unfortunately, many of the GPS device manufacturers still appear uninterested in finding a win-win solution. Rather, their only "proposal" to a problem largely of their own making --by, in the words of the FCC, failing to design "receivers that reasonably discriminate against

reception of signals outside their allocated spectrum"—is that the FCC should simply block LightSquared from using its own spectrum. The support for their proposal is fear; fear that no technical solution is possible.

Fortunately, the FCC has a long history of successfully seeing through similar fear-based arguments from incumbents. From the early days of CPE competition to the opening of the long distance and local telephone markets, the development of satellite competition and the licensing of multiple wireless carriers, the FCC has time and time again embraced competition and technical solutions over fear-based, emotional objections. It must do so again in this proceeding; the need for expanded wireless services is too great for frequency to be inefficiently wasted.

Concerns with NPEF's Testing Process. The process used to test GPS devices by Air Force Space Command on behalf of the Space-Based Positioning, Navigation, and Timing Executive Committee (PNT EXCOM) appears to have been severely biased by manufacturers of GPS receivers and government end users. LightSquared has itself identified several failures in the process that compromised the results.

- Testing included many older, discontinued, or niche market devices with poor filters or no filters at all. The typical production life for a GPS device is 1-3 years, but apparently at least one device tested was produced as far back as 1998.

- In addition, some of the niche models tested included those used by hikers. GPS produces fewer than 1000 of these devices annually.

- The units that "failed" the NPEF's inappropriate measure represent less than one percent of the contemporary universe of GPS devices. Interestingly, the only *mass market* device alleged to "fail" during this round of testing actually performed flawlessly during the Technical Working Group testing, which used best practice protocols agreed to by all parties. The fact that this was not raised or discussed in the PNT EXCOM report raises fundamental doubts about the integrity of PNT EXCOM's process.

- NPEF did not test for positional accuracy thus failing to validate important findings from the TWG data.

- NPEF also failed to comply with a government directive to test precision devices **with** filtering solutions. Instead, NPEF deliberately included devices **without** those filters into the testing process. Testing devices without filters demonstrates a direct and intentional violation of basic principles of fairness and objectivity.

In addition, the NTIA's definition of "harmful interference" holds LightSquared to a "standard" that appears to be without any foundation. It is generally recognized that a one dB threshold can only be detected in laboratory settings and thus has no impact on GPS positional accuracy. Indeed, GPS devices are designed with the ability to withstand eight dB or more of loss of sensitivity due to man-caused and natural interference. A secretive, flawed testing process cannot be the basis for deciding such a critical U.S. policy decision. If such an approach were used by a foreign government against a U.S. company, the U.S. government would complain about the lack of fairness and transparency.

Conclusion. The GPS-LightSquared debate has been sadly positioned as a "win-lose" dilemma, suggesting a winner-take-all outcome -- that in order for one technology to exist, the other must lose. That is unfortunate and shortsighted. Securing ***both*** GPS and nationwide wireless broadband should be and can be the goal. Moreover, it is extraordinary that the FCC would rush to judgment, without applying any independent review, basing its proposed decision on testing and analyses that are so obviously flawed. The FCC should re-examine the data and work with the parties to adopt the LightSquared solution and move forward promptly.

Sincerely,

EVP & General Counsel
CENX, Inc.

CC:
Commissioner Mignon Clyburn
Commissioner Robert McDowell